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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,509	10/05/2005	Noritada Katayama	2005_1546A	2516

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EXAMINER

NAQI, SHARICK

ART UNIT	PAPER NUMBER
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3736

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/552,509	Applicant(s) KATAYAMA, NORITADA	
	Examiner Sharick Naqi	Art Unit 3736	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 6-16 is/are rejected.
- 7) ☒ Claim(s) 3-5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/5/2005</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

Claims 1, 4 and 17-20 are objected to because of the following informalities:

Line 2 of page 2 recites, "a plurality of biological sensor modules attached to the right side and left side of a subject body." Applicant appears to be claiming a part of the human body in the claims, which is non statutory subject matter. Examiner suggests that the limitation be changed to "a plurality of biological sensor modules adapted to be attached to the right side and left side of a subject body".

In regards to claim 4, lines 17-18 of page 2 recite, "pulse difference not less than 7 beats per minute between the body temperature measured on the right and left sides of the subject." Examiner suggests that the limitation be changed to "pulse difference not less than 7 beats per minute between the pulse measured on the right and left sides of the subject."

In regards to claim 17, lines 8-10 on page 5 states that, "communication means **notifies** identification signals . . . to allow said external electronic device to figure out said identification signals and determination result, thereby to identify said living subjects" Examiner suggests that "notifies" be changed to "transmits." Claims 18-20 should be similarly corrected.

Any claims dependent of the above claims are objected to as being dependent on an objected claim. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-2 and 6-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lamb USPN 3,651,694 in view of Alvarez USPN 6,238,354.

In regards to claim 1, Lamb discloses a biological information (temperature) monitoring system comprising

a plurality of biological information sensor modules attached to the right side and left side of a subject body, said biological information sensor modules each incorporating a biological information sensor for detecting biological information and communication means for communicating said biological information, and a determination means for performing determination of abnormality by comparing said

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biological information detected by the two biological information sensors (column 1, lines 30-75).

Lamb does not disclose that the biological sensor modules each incorporate a communication means for communicating said biological information by wireless. Lamb also does not disclose that at least one of said biological information sensor modules includes the determination means for performing determination of abnormality by comparing said biological information detected by said biological information sensor in the biological information sensor module itself with biological information sent from the other biological information sensor module through said communication means.

However Alvarez, a reference in an analogous art, discloses a temperature monitoring assembly for continuously monitoring a patient from a remote location with two biological information sensor modules on a user's left and right arms wherein the determination means for calculating the temperature is on one sensor module. The determination means averages biological information detected by said biological information sensor in the biological information sensor module itself with biological information sent from the other biological information sensor module using wireless communication (Fig. 4, column 2, lines 1-45, column 7, lines 5-34). Because both Lam and Alvarez disclose temperature monitoring systems wherein two sensor modules measure temperature on different sides of the body, it would have been obvious to one having ordinary skill in the art to substitute the sensor modules of Lamb with Alvarez's known temperature monitoring assembly for the predictable result of being able to continuously monitoring a patient's temperature from a remote location.

2. The biological information monitoring system set forth in claim 1, wherein said biological information detected by said biological information sensor is at least one of body temperature, pulse and blood pressure. (Lamb column 1, lines 30-75)

6. The biological information monitoring system set forth in claim 1, further comprising biological information sensor modules for issuing a warning when said determination means detects abnormality. (Lamb column 1, lines 30-75, Alvarez column 6, lines 30-67)

7. The biological information monitoring system set forth in claim 1, wherein at least one of said biological information sensor modules incorporates a communication means for communicating with the outside to release determination result of said determination means by wireless and an external electronic device for receiving said determination result outputted from said communication means. (Alvarez column 5, lines 1-67 and column 6, lines 1-15)

8. The biological information monitoring system set forth in claim 1, wherein at least one of said biological information sensor modules incorporates a memory for storing at least one of the determination result outputted from said determination means and the biological information measured by said biological information sensor. (Alvarez column 6, lines 1-15)

9. The biological information monitoring system set forth in claim 6, wherein at least one of said biological information sensor modules incorporates a memory for storing at least one of the determination result outputted from said determination means and the biological information measured by said biological information sensor. (Alvarez column 6, lines 1-15)

10. The biological information monitoring system set forth in claim 7, wherein at least one of said biological information sensor modules incorporates a memory for storing at least one of the determination result outputted from said determination means and the biological information measured by said biological information sensor. (Alvarez column 6, lines 1-15)

11. The biological information monitoring system set forth in claim 1, further comprising an electronic device for transmitting data to said biological information sensor module by wireless, so as to perform abnormality determination with reference to said data sent from said electronic device in said determination means. (Alvarez column 5, lines 1-67 and column 6, lines 1-15)

12. The biological information monitoring system set forth in claim 6, further comprising an electronic device for transmitting data to said biological information sensor module by wireless, so as to perform abnormality determination with reference to said data sent

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from said electronic device in said determination means. (Alvarez column 5, lines 1-67 and column 6, lines 1-15)

13. The biological information monitoring system set forth in claim 7, further comprising an electronic device for transmitting data to said biological information sensor module by wireless, so as to perform abnormality determination with reference to said data sent from said electronic device in said determination means. (Alvarez column 5, lines 1-67 and column 6, lines 1-15)

14. The biological information monitoring system set forth in claim 8, further comprising an electronic device for transmitting data to said biological information sensor module by wireless, so as to perform abnormality determination with reference to said data sent from said electronic device in said determination means. (Alvarez column 5, lines 1-67 and column 6, lines 1-15)

15. The biological information monitoring system set forth in claim 9, further comprising an electronic device for transmitting data to said biological information sensor module by wireless, so as to perform abnormality determination with reference to said data sent from said electronic device in said determination means. (Alvarez column 5, lines 1-67 and column 6, lines 1-15)

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16. The biological information monitoring system set forth in claim 10, further comprising an electronic device for transmitting data to said biological information sensor module by wireless, so as to perform abnormality determination with reference to said data sent from said electronic device in said determination means. (Alvarez column 5, lines 1-67 and column 6, lines 1-15)

Claims 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lamb USPN 3,651,694 in view of Alvarez USPN 6,238,354 as applied to claims 7, 10, 13 and 16 above, and further in view of Besson et al. USPN 5,862,803.

In regards to claims 17-20, Lamb modified by Alvarez (hereinafter called Lamb modified) discloses the biological monitoring systems set for in claims 7, 10, 13 and 16.

Lamb modified does not disclose the biological systems wherein said communication means notifies identification signals for distinguishing individual living subjects each having the biological information sensor module as well as said determination result data by wireless, to allow said external electronic device to figure out said identification signals and said determination result, thereby to identify said individual living subjects.

However Besson et al., a reference in an analogous art, discloses a wireless medical diagnosis system with biological sensor modules including body temperature sensors (Abstract and column 13, lines 25-45). Each module is assigned an

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identification code corresponding to the patient to whom it is attached. An external device can then differentiate between data received from different patients' sensor modules by using the identification code received with the data (Column 8, lines 5-25). This is equivalent to the claim limitation of a biological systems wherein said communication means notifies identification signals for distinguishing individual living subjects each having the biological information sensor module as well as said determination result data by wireless, to allow said external electronic device to figure out said identification signals and said determination result, thereby to identify said individual living subjects. Because both Lamb modified and Besson disclose temperature sensors attached to the body, it would have been obvious to one of ordinary skill in the art at the time of invention to improve Lamb modified by using Besson's known technique of having identification codes for each sensor module corresponding to the patient to whom the sensor module is attached such that the external device receiving data can use the received identification code to differentiate between data from different patients and their sensor modules for the predictable result of monitoring multiple patients' temperature.

Allowable Subject Matter

Claims 3-5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

For claim 3, the following limitation was not found in the prior art, "temperature difference not lower than 0.5°C between the body temperatures measured on the right and left sides of the subject is determined as abnormal by said determination means."

For claim 4, the following limitation was not found in the prior art, "pulse difference not less than 7 beats per minute between the body temperatures measured on the right and left sides of the subject is determined as abnormal by said determination means."

For claim 5, the following limitation was not found in the prior art, "blood pressure difference not less than 10 mmHg between blood pressure measured on the right and left sides of the subject is determined as abnormal by said determination means."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharick Naqi whose telephone number is 571-272-3041. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on 571-272-4726. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Sharick Naqi
September 17, 2007



Michael Astorino